

REMARKS

Claims 1, 2 and 4 – 8 are pending in this application with claims 1 and 8 being amended by this response. Claims 1 and 8 are amended to clarify the claimed feature in accordance with the suggestion of the Examiner to correct the objection to the claims discussed below. No new matter was entered in view of these amendments.

Objection to the Drawings

The drawings are objected to as some labels are upside down. Amended drawings correcting the orientation of the labels are submitted with this response. Please replace Figures 3 – 6 on drawing sheets 2 and 3 with the Replacement Drawing sheets submitted herewith. Figures 3 – 6 have been amended in accordance with the Examiner's suggestion to correct the orientation of the Figures and labels depicted therein. Additionally, Figures 3 – 6 are formally amended to provide darker lines to delineate the various elements depicted therein. No new matter is added by the amendments made to Figures 3 – 6. Therefore, it is respectfully submitted that this objection has been satisfied and should be withdrawn.

Objection to the Specification

The specification is objected to as not including headings. The specification has been amended to include headings as suggested in the Office Action. No new matter is added by these amendments. In view of the amendments to the Specification, it is respectfully submitted that this objection is overcome and should be withdrawn.

Objection to the Claims

The claims are objected to as not providing antecedent basis for all terms. Claims 1 and 8 have been amended in accordance with the comments in the Office Action to provide antecedent basis for all terms. No new matter is added by these amendments. In view of the amendments to the claims, it is respectfully submitted that this objection is overcome and should be withdrawn.

Rejection of Claims 1, 5 and 8 under 35 U.S.C. 103(a)

Claims 1, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier et al. (U.S. Patent 5, 966,387 hereafter known as 'Cloutier') in view of Upp et al. (U.S. Patent 5,608,731 hereinafter known as 'Upp') Applicants respectfully traverse.

The failure of an asserted combination to teach or suggest each and every feature of a claim remains fatal to an obviousness rejection under 35 U.S.C. § 103. Section 2143.03 of the MPEP requires the "consideration" of every claim feature in an obviousness determination. To render a claim unpatentable, however, the Office must do more than merely "consider" each and every feature for this claim. Instead, the asserted combination of the patents must also teach or suggest *each and every claim feature*. See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) (emphasis added) (to establish *prima facie* obviousness of a claimed invention, all the claim features must be taught or suggested by the prior art). Indeed, as the Board of Patent Appeals and Interferences has confirmed, a proper obviousness determination requires that an Examiner make "a searching comparison of the claimed invention - *including all its limitations* - with the teaching of the prior art." See *In re Wada and Murphy*, Appeal 2007-3733, citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis in original). "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious" (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Claim 1 recites a device for temporal slaving in a packet data transmission network. The device includes a local reception clock, where each incoming data packet comprises a time label and a means of temporary storage for receiving packets from the network and the storage having a storage capacity for recording data received for a predetermined time (IPDV) dependent on characteristics of the network. The device also includes a

means for regenerating a local reception clock as a function of the time label of the incoming packets. The device also includes a means for reading the data in the means of temporary storage at an instant dependent on the predetermined time (IPDV) and on the regenerated local reception clock, wherein the means for regenerating a local reception clock comprises a differentiator for calculating a difference between the time label and the regenerated local reception clock, a means for accumulating the difference between the time labels of the incoming data packets and the local reception clock during a period of time and a decision means for comparing the accumulated difference and the local clock and modifying the regenerated local reception clock according to the comparison. For the reasons presented below, Applicants respectfully submit that Cloutier, alone or in combination with Upp, fails to teach or suggest each feature of the present claimed arrangement.

Cloutier describes a method for detecting and correcting jitter caused during transport of digital information. The Office Action asserts that Cloutier, in column 13, lines 7 – 11, teaches “a means of temporary storage for receiving packets from said network and said storage having a storage capacity for recording data received for a predetermined time (IPDV) dependent on characteristics of the network” as recited in claim 1. Applicants respectfully disagree. The cited section (and elsewhere) merely describe a FIFO buffer. There is nothing in this section of Cloutier or elsewhere that defines the storage capacity being dependent on network characteristics. Therefore, contrary to the assertion in the Office Action, Cloutier fails to teach or suggest “a means of temporary storage for receiving packets from said network and said storage having a storage capacity for recording data received for a predetermined time (IPDV) dependent on characteristics of the network” as recited in claim 1.

The Office Action further asserts that Cloutier teaches “a means for regenerating a local reception clock as a function of the time label of the incoming packets” in column 10, lines 53 – 61 and elements 130 and 134 of

Figure 2. Applicants respectfully disagree. Contrary to the assertion in the Office Action, element 130 is a timing circuit that outputs a count value in response to an independent clock signal generated by clock 134. This is not equivalent to “regenerating a local reception clock as a function of the time label of the incoming packets” as in the claimed arrangement. In fact, Cloutier teaches away from the claimed arrangement because Cloutier clearly sets forth that the clock 134 has a rate that is independent of the detection of PCR values from an MPEG stream. Therefore, Cloutier fails to teach or suggest “a means for regenerating a local reception clock as a function of the time label of the incoming packets” as in the claimed arrangement.

Additionally, as Cloutier fails to regenerate a local reception clock as provided above, it follows that Cloutier cannot disclose or suggest “a means for reading the data in the means of temporary storage at an instant **dependent** on the said predetermined time (IPDV) and **on the regenerated local reception clock**” as recited in the present claimed arrangement. Additionally, the section of Cloutier relied on in the Office Action and elsewhere fails to teach or suggest the claimed feature. Rather, the cited section merely teaches that the output clock signal increases or decreases based on the PCR values of the MPEG stream in the buffer. There is no mention of the data to be read from the temporary storage means “at an instant **dependent** on the said predetermined time (IPDV) and **on the regenerated local reception clock**” as in the claimed arrangement.

The Office Action concedes that Cloutier fails to teach or suggest “a differentiator for calculating a difference between the time label and the regenerated local reception clock, a means for accumulating said difference between the time labels of the incoming data packets and the local reception clock during a period of time and a decision means for comparing said accumulated difference and the local clock and modifying the regenerated local reception clock according to said comparison” as recited in claim 1 and cites Upp in combination with Cloutier to support the assertion that the claimed arrangement is disclosed. For the reasons presented below,

Applicants respectfully submit that Upp, similarly to Cloutier, fails to teach or suggest the features of the present claimed arrangement.

The Office Action relies on column 3, lines 38 – 49 of Upp in support of the assertion that Upp teaches “a differentiator for calculating a difference between the time label and the regenerated local reception clock, a means for accumulating said difference between the time labels of the incoming data packets and the local reception clock during a period of time and a decision means for comparing said accumulated difference and the local clock and modifying the regenerated local reception clock according to said comparison” as recited in claim 1. Applicants respectfully disagree.

Upp fails to teach or suggest “a differentiator for calculating a difference between the time label and the regenerated local reception clock” as in the claimed arrangement. Rather, Upp generates a local RTS at a destination node using the frequency of the network to recover a clock signal at the destination node. This is unlike the claimed arrangement which uses the time label of each incoming data packet and a regenerated local reception clock signal regenerated as “a function of the time label of the incoming packets”. Network frequency as in Upp is not equivalent to time labels of each individual incoming data packet as in the claimed arrangement.

Upp, similarly to Cloutier, also fails to teach or suggest “a means for accumulating said difference between the time labels of the incoming data packets and the local reception clock during a period of time” as in the claimed arrangement. Nowhere in the section of Upp relied on (or elsewhere) is this feature disclosed. Unlike the claimed arrangement Upp calculates the difference between the incoming RTS and the local RTS and uses the result as a feedback control. Moreover, the Office Action makes an incorrect assertion that because this process repeats means that Upp teaches or suggests “accumulating said difference between the time labels of the incoming data packets and the local reception clock during a period of time” is overly broad and unsupported. Repeating a comparison as in Upp is not

equivalent to accumulating the results of successive comparisons as in the claimed arrangement. No such accumulation feature over a period of time is taught or suggested by Upp.

Therefore, because Upp (with Cloutier) fails to teach or suggest “a means for accumulating said difference between the time labels of the incoming data packets and the local reception clock during a period of time”, Upp (with Cloutier) cannot teach or suggest “a decision means for comparing said accumulated difference and the local clock and modifying the regenerated local reception clock according to said comparison” as in the claimed arrangement.

Even if one were to combine Cloutier with Upp, the result would still fail to teach or suggest each feature of the present claimed arrangement because alone or in combination with one another, Cloutier (with Upp) fail to teach or suggest each feature of the present claimed arrangement as discussed above. Therefore, it is respectfully submitted that this rejection has been satisfied and should be withdrawn.

Claim 5 is dependent on claim 1 and is considered patentable for the reasons presented above with respect to claim 1.

Independent claim 8 includes features similar to those claimed in claim 1 and therefore is considered patentable for the reasons presented above with respect to claim 1

In view of the above remarks, it is respectfully submitted that the Office Action fails to make a prima facie case that claims 1, 5 and 8 are unpatentable in view of Cloutier and Upp. Thus, it is respectfully submitted that this rejection has been overcome and should be withdrawn.

Rejection of Claim 2 under 35 U.S.C. 103(a)

The Examiner rejected Claim 2 under 35 U.S.C. 103(a) as being unpatentable in view of Cloutier in view of Upp and further in view of Akiyama (U.S. Patent Publication No. 2005/0152213A1). Applicants respectfully traverse.

Claim 2 is dependent on claim 1 and is considered patentable for the reasons presented above with respect to claim 1. The Office Action acknowledges that Cloutier and Upp fail to teach or suggest “the means of reading the data in the means of temporary storage are adapted for reading the data in the means of temporary storage when the difference between the said predetermined time and the regenerated local clock is greater than the value of the time label of the next packet to be output from the means of temporary storage” as recited in claim 2 and cites Akiyama as showing this feature. Applicants respectfully disagree.

The Office Action relies on paragraph 18 of Akiyama to support the assertion that the claimed feature is disclosed. However, unlike the claimed arrangement, Akiyama merely provides a time management system that detects an external time during a predetermined time span. After comparing the external time to a local time, Akiyama sets the local time as the external time if the difference between the values is less than a threshold. Akiyama does not set the local time as the external time if the value is equal or greater than the predetermined value. Akiyama further provides generating and storing authorization codes to ensure that the time being set is not tampered with. This is fundamentally different from the present claimed arrangement which uses the difference between the predetermined time and the regenerated clock time (which is generated as a function of the time label of the incoming data packets) for comparing with the time label **of the next packet to be output from the means of temporary storage**. No such feature is taught or suggested by Akiyama (with Cloutier and Upp). Setting an

internal clock value equal to a determined external time value as in Akiyama (with Cloutier and Upp) is not equivalent to “the means of reading the data in the means of temporary storage [being] adapted for reading the data in the means of temporary storage when the difference between the said predetermined time and the regenerated local clock is greater than the value of the time label of the next packet to be output from the means of temporary storage” as in the present claimed arrangement.

In view of the above remarks, it is respectfully submitted that the Office Action fails to make a prima facie case that claim 2 is unpatentable in view of Cloutier, Upp and Akiyama. Thus, it is respectfully submitted that this rejection has been overcome and should be withdrawn.

Rejection of Claims 4 and 6 under 35 U.S.C. 103(a)

The Examiner rejected Claims 4 and 6 under 35 U.S.C. 103(a) as being unpatentable in view of Cloutier in view of Upp and further in view of Yamada et al. (U.S. Patent 6,675,314B1). Applicants respectfully traverse

Claims 4 and 6 are dependent on claim 1 and are considered patentable in view of the arguments presented above with respect to claim 1. Claims 4 and 6 are also considered patentable because Yamada, when taken alone or in combination with Cloutier and Upp, fails to teach or suggest “a means for regenerating a local reception clock as a function of the time label of the incoming packets” as in the claimed arrangement. Additionally, Yamada (with Cloutier and Upp) fails to teach or suggest “a differentiator for calculating a difference between the time label and the regenerated local reception clock, a means for accumulating said difference between the time labels of the incoming data packets and the local reception clock during a period of time and a decision means for comparing said accumulated difference and the local clock and modifying the regenerated local reception clock according to said comparison” as recited in the present claimed arrangement.

In view of the above remarks, it is respectfully submitted that the Office Action fails to make a prima facie case that claims 4 and 6 are unpatentable in view of Cloutier, Upp and Yamada. Thus, it is respectfully submitted that this rejection has been overcome and should be withdrawn.

Rejection of Claim 7 under 35 U.S.C. 103(a)

The Examiner rejected Claim 7 under 35 U.S.C. 103(a) as being unpatentable in view of Cloutier in view of Upp and further in view of Lim et al. (U.S. Patent 6,466,547B1). Applicants respectfully traverses.

Claim 7 is dependent on claim 1 and is considered patentable in view of the arguments presented above with respect to claim 1. Claims 7 is also considered patentable because Lim, when taken alone or in combination with Cloutier and Upp, fails to teach or suggest "a means for regenerating a local reception clock as a function of the time label of the incoming packets" as in the claimed arrangement. Additionally, Lim (with Cloutier and Upp) fails to teach or suggest "a differentiator for calculating a difference between the time label and the regenerated local reception clock, a means for accumulating said difference between the time labels of the incoming data packets and the local reception clock during a period of time and a decision means for comparing said accumulated difference and the local clock and modifying the regenerated local reception clock according to said comparison" as recited in the present claimed arrangement.

In view of the above remarks, it is respectfully submitted that the Office Action fails to make a prima facie case that claim 7 is unpatentable in view of Cloutier, Upp and Lim. Thus, it is respectfully submitted that this rejection has been overcome and should be withdrawn.

Having fully addressed the Examiner's objections and rejections, it is believed that this patent application is in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested. If, however, the

Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the Applicant's attorney at (609) 734-6809, so that a mutually convenient date and time for a telephonic interview may be scheduled.

If any additional fees are due in connection with this matter, please charge them to Deposit Account No. 07-0832.

Respectfully submitted,
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